

## ABSTRACT OF THE DISCLOSURE

A three-dimensional object of a desired shape is made by irradiating an optical beam on a metal powder layer to form a sintered layer and by laminating such  
5 sintered layer one above another. A metal powder composition for use in making such a three-dimensional object includes an iron-based powder material, a nickel and/or nickel alloy powder material, a copper and/or copper alloy powder material, and a graphite powder material. The graphite powder material acts to enhance the wettability during melting and to reduce microcracks during solidification.